

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of)	
)	
Shielding of Electronics Equipment)	RM-10330
Against Acts of War or Terrorism)	
Involving Hostile Use of)	
Electromagnetic Pulse)	

**SBC COMMUNICATIONS INC.'S
OPPOSITION TO PETITION FOR NOTICE OF PROPOSED RULEMAKING**

Pursuant to the Consumer Information Bureau's "Public Notice," dated November 15, 2001,¹ SBC Communications Inc., on its own behalf and on behalf of its local exchange carriers,² (SBC) submits this in opposition to the Petition for a Notice of Proposed Rulemaking filed by Donald J. Schellhardt and Nickolaus E. Leggett (Petitioners).³

Petitioners seek to implement widespread shielding requirements on vital electronics equipment to protect it from an Electromagnetic Pulse (EMP) attack. SBC opposes this petition because there are current industry standards that protect telecommunications equipment from such an attack. Given this fact, the proposed rulemaking would impose enormous costs on all telecommunications companies with little or no appreciable benefit. The Federal Communications Commission (Commission) should dismiss this petition and allow the technical advisory groups to work with the telecommunications industry and other industry segments on the continuing development of these standards.

¹ *Public Notice: Consumer Information Bureau Reference Information Center Petitions For Rulemaking Filed*, Report No. 2512 (rel. November 15, 2001).

² These local exchange carriers include the Ameritech operating companies (Illinois Bell Telephone Company, Indiana Bell Telephone Company, Michigan Bell Telephone Company, The Ohio Bell Telephone Company, and Wisconsin Bell, Inc.), Nevada Bell Telephone Company, Pacific Bell Telephone Company, Southern New England Telephone, Southwestern Bell Telephone Company, and SBC Telecom.

³ *See* Petition for Notice of Proposed Rulemaking By Donald J. Schellhardt, Esquire and Nickolaus E. Leggett (September 27, 2001).

A. Industry Standards

Petitioners state that in 1986 their Notice of Inquiry was deemed unnecessary due to ongoing technical standards work. The petitioners contend that in the last 15 years no action ever came out of the National Security Telecommunications Advisory Committee (NSTAC) or the American National Standards Institute (ANSI) technical standards advisory groups. In fact, the Alliance for Telecommunications Industry Solutions' (ATIS) Electrical Protection Working Group, T1E1.7, was charged with developing and publishing standards related to electrical protection of the telecommunications network. The scope of the Electrical Protection Working Group includes, but is not limited to:

[S]ystem-level electrical protection of telecommunications networks, including wireline, optical and wireless networks. Electrical stresses may include system-level electrostatic discharge (ESD) criteria for central office equipment, lightning and ac power influences, electromagnetic interference (EMI), and electromagnetic pulse (EMP). Electrical protection methods may include equipotential bonding, grounding, and the application of electrical protection devices. Network facilities covered include telecommunications central offices, switching centers and similar type facilities, outside plant such as aerial, buried and underground wire and cable, and network plant at entrances to customer structures or buildings

This working group has developed, published, and is maintaining six technical standards related to the above electrical stresses. Four of these standards are "baseline standards" and the remaining two are "above baseline standards." Baseline standards contain electrical protection methods that are incorporated into the telecommunications network as the normal course of business. These methods provide shielding, bonding, grounding, and protective devices intended to mitigate electrical stresses in the network (e.g., lightning). The above baseline standards augment the baseline requirements and are intended to protect the telecommunications network from extraordinary electrical and other stresses. EMP shielding and protection methods are addressed in the above baseline requirements.

Adequate standards already exist that address protection of the telecommunications network from EMP. These standards were developed and are being maintained by

representatives of the telecommunications industry and the government. SBC proposes that, given the ongoing standards activity, no action is required by the Commission on this matter.

B. Network Costs

The Petition mentions a retrofit of entire equipment by January 2008, if there is a final rule by the Commission in January of 2003. The majority of all existing telecommunications equipment in SBC's network would require replacement in order to meet the proposed requirements. The cost of implementation of such shielding requirements in this petition would be staggering. SBC would need to determine if existing copper cable is capable of providing the necessary level of protection, and if it were not, SBC would need to replace it with proper cabling. In addition, SBC would need to install housed telecommunications equipment into shielded cages or enclosures. This level of protection on all facilities would increase the cost of providing service without an appreciable gain in service performance or a guarantee of operation after an EMP event.

Conclusion

SBC urges the Commission to dismiss this petition as it did 15 years ago and let the technical advisory groups develop and publish standards relating to electrical protection of the telecommunications network.

Respectfully submitted,

SBC COMMUNICATIONS INC.

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